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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/612,238	07/02/2003	Tetsujiro Kondo	450100-04655	4979	
William S. Fror	7590 12/18/200 nmer, Esq.	EXAMINER			
FROMMER LAWRENCE & HAUG LLP			YENKE, BRIAN P		
745 Fifth Avenue New York, NY 10151			ART UNIT	PAPER NUMBER	
,				2622	
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## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/612,238	KONDO ET AL.				
Office Action Summary	Examiner	Art Unit				
	BRIAN P. YENKE	2622				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>Amen</u>	ndment (10/02/08)					
	action is non-final.					
<i>;</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1,2,4 and 6-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>all the above</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some coll None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) X Notice of References Cited (PTO-892)	4) ☐ Interview Summary	(PTO-413)				
2) Notice of Traftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:						
Paper No(s)/Mail Date 6) LJ Other:						

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### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter.

Claims 17 recites a program stored on a storage medium, the program comprising

In order to comply with the 101 statue, the claims should state that a "computer-readable medium" (assuming support in the original disclosure, or machine-readable) which comprises/includes instructions which cause a processor/CPU etc...to execute the following: Currently, the claim is geared towards the program/software portions, and thus is not patentable in view of the 101 statute.

The examiner also presumes that the remaining claims, whether they are an apparatus, or method as claimed, pertain to some circuitry or hardware in order to comply with the 101 guidelines, in the event the applicant deems these claims readable on software, a program or non-circuitry execution, the examiner requests the applicant clarify such.

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The examiner notes MPEP 2106.1 which pertains to non-statutory subject matter, such as data structures/programs.

# I. FUNCTIONAL DESCRIPTIVE MATERIAL: "DATA STRUCTURES" REPRESENTING DESCRIPTIVE MATERIAL PER SE OR COMPUTER PROGRAMS REPRESENTING COMPUTER LISTINGS PER SE

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such

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claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material *per se* from claims that define statutory inventions.

Computer programs are often recited as part of a claim. USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, USPTO personnel should treat the claim as a process claim. \*\* When a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim. \*\*

### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4, and 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen, US 7,003,792 in view of Fedele, US 5,920354.

In considering claims 1 and 16-18

- a) the claimed processing means for processing the content data is met by Yuen which includes a video source and a source of advertisements which are processed in accordance with a user's viewing habit/profile.
- b) the claimed acquisition means...is met where the system uses a smart agent (SA) which collects information of a user to infer user's preferences and accordingly determine a user profile, which is based on the user's input/history.
- c)-d) the claimed generation means...is met where based upon the content data (video and advertisement) in accordance with the user information, determines the selection/filtering of such information to the user (col 53-67), wherein a user profile is generated based upon psych—demographic data (5), users selection (2), statistical data (4) which are integrated/modeled/weighted to obtain such profile (6) (see Fig 1a and related description).
- f) the claimed the value of the second weight...Yuen discloses (eq shown in claim 7) that certain events can give weight or take away weight for a given event, which is based in part on user's selection(s).

However, Yuen does not explicitly disclose the increasing resolution (limitation a) nor generating the second information by performing the weighting such that a greatest weights is applied to the median of the first information, not the value of the first weight being cumulative as claimed (limitation e), nor the calculating a set of coefficients as newly added.

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The concept of increasing the resolution of data is notoriously well known in the art, for the obvious result of obtaining a better picture thus the examiner incorporates Fedele, which discloses the conversion of a video signal from one format to another using the appropriate filter/coefficients. It is noted that Fedele discloses the conversion of HDTV to NTSC or NTSC to HDTV (col 7, line 53-64).

Yuen does disclose that the smart agent uses an iterative process/means to integrate the habit, statistics and pyscho-demographic information, using equations which are weighted and include the use of probabilities.

It is also known that when evaluating/measuring/detecting a user's viewing habit/profile, the habit/profile would include many layers/parameters (i.e. sports, news, or time of day etc...) and these individuals parameters (e.g. time) may be weighted greater in selecting/filtering such information to the user (i.e. the claimed 2nd information).

The examiner maintains that the weighting of one or more pieces information greater in relation to other pieces of information is considered obvious to one of ordinary skill in the art since statistics/probabilities/data measurement techniques afford such uses in order to provide a user/system the ability to weight different parameters according to different weights in order to provide a desired result(s) the limitation would be obvious to one of ordinary skill in the art to implement.

In the event the applicant disagrees, the examiner would like the applicant to clarify how this feature was not possible to be carried out or unknown in the prior art in order to expedite prosecution.

Regarding the newly added first weight is cumulative and is updated by adding the second weight to the first weight each time the second weight is generated, as stated above, the weighting of data, which includes adding or taking away weights (which Yuen discloses), would be performed by Yuen since the user selection (first information for instance) would be weighted/integrated with the other data (5 and 4, Fig 1a) which generates the user profile (2<sup>nd</sup> information) wherein the first information (user selection) is weighted with data 3, 4 and 5 (Fig 1a). Thus given the broadest reasonable interpretation when the

second weight (whether data 5, data 3 or data 4) is generated wherein the first weight may be the integrated data (3) which receives data's 2, 4 and 5.

It is also noted based upon the decision by the Supreme Court in KSR vs Teleflex, the premise that predictable variations, which could be performed by someone of ordinary skill in the art, would likely be barred via an obviousness (103) rejection. In the instant case the weighting of data/information as claimed, provides predictable results, and thus the 103 rejection was made. In the event the applicant disagrees and maintains that the results are not predictable the examiner requests applicant to clarify as such, and reasons stating why one of ordinary skill in the art could not implement/carry out such alleged (if applicants positively responds to such) variations, In order to expedite prosecution. The examiner's premise is the manipulation/weighting of data, whether using statistical/probability models etc...provides results which are based upon an equation(s)/algorithm(s), thereby being derived/predicted from such.

Regarding the newly added limitation of calculating a set of coefficients to generate pixel data of the high definition signal. It is noted that Yuen does not

In considering claims 2-3,

Refer to claim 1 above.

In considering claim 4,

Yuen discloses a user selection via input device 44.

- b) the claimed control command/data input detection...is met where the system includes a viewer input device 44 which is used by the SA to control the selection/filtering of information.
- c-d) the claimed wherein the generation means...is met wherein the SA based upon the user's selection determines the information that is delivered which can be matched, filtered or selected. Thus if a user spends more time enter a certain genre of information, the SA will customize the targeting using such genre (i.e. more weight for more time). By the same token if a user does not spend any time any particular genre/program/type of material, the system will not weight this material/content as much as what a user spends time watching/entering.

In considering claim 6,

Yuen discloses that based upon a user's viewing habits/profile, will provide the user information that is matched, filtered or selected based upon such habits/profile. Thus the data/features of video/audio services will be processed and delivered or not based upon the user's profile.

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In considering claim 13,

Refer to claim 1 above.

In considering claim 14,

Yuen discloses a receiver with a memory in addition to the ability to download information (col 2, line 9-22) meeting the claimed storage means.

In considering claims 7-8,

Yuen/Fedele does not explicitly recite the mean/variance of image level in feature detection, although it is known that data can be analyzed in a multitude of way in order to ascertain image quality/content or change, thus the examiner takes "OFFICIAL NOTICE" regarding such.

In considering claims 9-12,

Yuen/Fedele does not explicitly recite the detection of environmental information (i.e. ambient conditions). However, the concept of altering the viewing experience based upon temperature, time of day etc...are notoriously well known in the art and thus the examiner takes "OFFICIAL NOTICE" regarding such, since the inclusion of such enhances the viewing experience as previously known in the art.

In considering claim 15,

Although Yuen/Fedele does not explicitly recite removable storage, Yuen does disclose a system which may operate in a computer, television environment wherein it is known to store data on a

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removable media, such as a CD, DVD, etc...thus the examiner takes "OFFICIAL NOTICE" regarding such, for the obvious purpose of giving the user added portability/security of such information.

#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

### Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

### or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

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(703)305-HELP.

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(CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

/BRIAN P. YENKE/ Primary Examiner, Art Unit 2622

B.P.Y 16 Dec 08